

From: [Rafael Casanova](#)
To: [Philip Allen](#)
Cc: [Christopher Ruhl](#); [Gary Moore](#); [Gloria-Small Moran](#); [Philip Turner](#); [Kenneth Shewmake](#); [Anna Milburn](#); [Carlos Sanchez](#)
Subject: Falcon Refinery - RPM's Comments on Superior's Draft Work Plan
Date: 04/27/2010 11:16 PM
Attachments: [Superior work plan.pdf](#)
[2010 04 19 DO Resp to Site Investigaton Work Plan.pdf](#)

Philip, the work plan submitted by Superior is not acceptable from a remedial investigation (RI) "point of view." Let me know if you want to discuss the following comments:

(Note: A cursory review of the 2007 data collected for the Falcon RI indicated the presence of VOCs, SVOCs, and metals in the areas impacted by Superior's spill (Figure 2 [Extent of Crude Oil Release] of Superior's Work Plan). Human health and ecological risk evaluations have not been performed. I will provide a summary of the RI data to Gloria, as requested during the conference call last week, by COB Friday [4/30] or Monday [5/03]).

1. Section 1.1 (Project Objectives, Page 1) states that the overall objective of the investigation is to provide the data necessary to delineate the extent of impacted media at the Site such that a remediation plan can be developed. The sampling objective(s), or decision statement(s), for the investigation need to be clearly identified (e.g., "Determine the nature and extent of constituents of potential concern for all media on the refinery property, including the impacted wetland areas, that are present at concentrations above or below risk-based screening levels and/or background concentrations along complete exposure pathways for relevant exposure scenarios and require remedial action [cleanup] or no further action.").
2. Section 2.1 (Work Plan Rationale, Page 3) states that an investigation will not be conducted in the wetland area (termed "Duck Pond" by Superior). A sediment and surface water sampling strategy needs to be proposed for the wetland area.
3. Section 2.2 (Scope of Work, Task 2 - Soil Sampling, Page 3) states that samples will be collected from 0-6 inches. A soil sampling strategy, that identifies several depth intervals, needs to be proposed for the impacted areas (e.g., collection of samples from the 0-6 inch interval, the interval[s] with the highest organic vapor reading, and the interval immediately above the ground water table).
4. Section 2.2 (Scope of Work, Task 2 - Soil Sampling, Page 3) discusses the number of soil samples that will be collected for the investigation. The number of soil samples presented in the work plan may not be sufficient to "delineate" the vertical and horizontal extent of contamination caused by the spill. Also, additional samples need to be proposed for all media possibly affected by the spill.
5. Section 2.2 (Scope of Work, Task 2 - Soil Sampling, Page 4) states that all samples will be analyzed for TPH and BTEX. Samples also need to be analyzed for VOCs, SVOCs, and metals. These constituents have been detected in samples analyzed during the Falcon RI. TPH and BTEX analyses alone will not identify other organics that may be present in the impacted areas.
6. Section 2.2 (Scope of Work, Task 2 - Soil Sampling, Page 4) states that field duplicates and equipment blank samples will be collected. The number and types of



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these samples need to follow the EPA's/TCEQ's quality assurance/quality control guidelines, which include MS/MSD samples, etc.

7. Section 2.2 (Scope of Work, Task 3 - Perform Risk-Based Screening, Page 5) states that the soil analytical results will be tabulated and screened against applicable risk-based regulatory criteria for TPH and BTEX. Additionally, analytical results for VOCs, SVOCs, and metals should be screened against the applicable EPA Region 6 MSSSLs, and TCEQ Tier 1 PCLs and ecological screening values. Also, the detection limits for TPH, BTEX, VOCs, SVOCs, and metals need to be lower than their respective screening levels. Human health and ecological screening levels are specified for the Falcon RI.

8. Section 2.2 (Scope of Work, Task 4 - Prepare Report and Remediation Plan, Page 5) states that Superior will seek remediation under the Operator Cleanup Program of the Railroad Commission (RRC). It is my understanding that this program allows for remediation of the soil by achieving a final cleanup level of 1.0% by weight of TPH no later than one year after the spill incident. Additionally, the Texas Administrative Code states that ". . . the soil to be bioremediated [if this alternative is chosen] must be mixed with ambient or other soil to achieve a uniform mixture that is no more than 18 inches in depth and that contains no more than 5.0% by weight TPH." These RRC cleanup standards apply to the cleanup of soil in non-sensitive areas. According to the RRC's definition of "sensitive areas," this investigation could not consider these cleanup standards because of the site's proximity to sensitive areas (i.e., the occurrence of shallow ground water, and the close proximity of surface water and wetland areas). Additionally, I don't know that these standards would meet the EPA's requirements for cleanup under the Superfund program.

9. Table 1 lists the sampling and analytical requirements for TPH and BTEX. This table should include similar information for VOCs, SVOCs, and metals, including the proposed number of samples for each media.

10. A statistically sufficient number of background samples need to be collected at locations unimpacted by refinery/recycling operations if metals will be analyzed for this investigation. The background sampling locations should be taken from media with similar characteristics as the refinery property, including the wetland areas. There may not be a need to establish background if metals are excluded from the list of constituents since, by definition, organics would not be present in areas unimpacted by refinery operations. I do not believe that there should be an attempt to distinguish between organics present before (e.g., background from the operations of the Falcon refinery) and after Superior's spill. Any organics and metals, if included in the list of constituents, present in the area impacted by the Superior spill need to be addressed.

11. Ground water sampling needs to be proposed for the impacted areas.

12. A detailed "Field Sampling Plan" and Quality Assurance Project Plan" need to be prepared for this investigation in order to gather sufficient environmental data of useable quality that are necessary to determine the vertical and horizontal extent of contamination and risks to receptors.

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Assigned Sites for Investigation and Remediation
(<http://www.epa.gov/earth1r6/6sf/6sf-tx.htm>):
Brine Service Company Superfund Site (Corpus Christi, Texas)
Falcon Refinery Superfund Site (Ingleside, Texas)
Many Diversified Interests, Inc. Superfund Site (Houston, Texas)

▼ Philip Allen---04/23/2010 12:37:48 PM---All, Please take a look at this work plan and let me know if you have any concerns; and provide com

From: Philip Allen/R6/USEPA/US
To: Rafael Casanova/R6/USEPA/US@EPA, Christopher Ruhl/R6/USEPA/US@EPA, Gloria-Small Moran/R6/USEPA/US@EPA, Gary Moore/R6/USEPA/US@EPA
Cc: jessica.white@noaa.gov, Barry Forsythe/R6/USEPA/US@EPA, Philip Turner/R6/USEPA/US@EPA
Date: 04/23/2010 12:37 PM
Subject: Fw: Superior Crude Gathering - Falcon Refinery - Ingleside, Texas

All,

Please take a look at this work plan and let me know if you have any concerns; and provide comments as appropriate, and as soon as practical.

As always thanks for your help.

Kindest Regards,

Phil Allen

----- Forwarded by Philip Allen/R6/USEPA/US on 04/23/2010 12:43 PM -----

Superior Crude Gathering - Falcon Refinery - Ingleside, Texas

Heidi
Bojes to: Philip Allen

04/23/2010
12:24 PM

Cc: "David Cooney", "Peter Pope"

Phillip,

I am sending you a copy of Superior's work plan and a copy of RRC's response to the work plan.

Last time we spoke you mentioned that you wanted this information.

Thanks,

Heidi
512-475-3089



Superior work plan.pdf



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